

Special Issue

Sediment Pollution Process and Microbial Responses in Aquatic Environment

Message from the Guest Editors

Nutrients such as phosphorus and nitrogen, and pollutants such as heavy metals, microplastics, and antibiotics, are released into the surface aquatic environment from agricultural, industrial, and municipal sources, posing risks to human health. As one of the most significant mediums in the aquatic environment, sediment plays a crucial role in the migration and transformation of these pollutants. The physical and chemical properties of sediments, the environmental conditions at the sediment–water interface, and microbial communities are all important factors influencing the environmental behavior of pollutants. In addition, the migration and transformation of pollutants in sediments can alter the properties of sediment and the interface conditions, thus affecting microbial activities. This Special Issue welcomes the submission of articles that address scientific issues such as the mechanism of sediment pollution and the responses of microbial communities to these processes. We also welcome the submission of original research, novel methods and protocols, and reviews. For further reading:

https://www.mdpi.com/journal/water/special_issues/4B4091O68Q

Guest Editors

Dr. Fei-Fei Che

National Engineering Laboratory for Lake Pollution Control and Ecological Restoration, Chinese Research Academy of Environmental Sciences, Beijing 100012, China

Dr. Wei Huang

College of Environmental Science and Engineering, Donghua University, Shanghai 201620, China

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Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

water@mdpi.com

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In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST

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